# qquads

**Location**: property\qquads

## **Description**

This layer consists of an index for 3.75-minute quads in Bay County, dividing the USGS 7.5-minute quads into quarter-quads. The layer has 84 polygons, along with arc attributes.

**Coordinate system**: State Plane, Florida North Zone, Datum NAD83, feet (see .prj file)

### Source

In December 1999, Bay County GIS staff downloaded quarter-quad grid data from the Florida Dept of Environmental Protection (FDEP) website, along with metadata. FDEP generated the quad grid in ArcInfo; see FDEP's metadata at bottom of this document. In ArcInfo, Bay County GIS imported then projected the data from Albers to Stateplane (Zone 3576, NAD83 feet), naming the statewide coverage **qquads\_fl.** Bay County GIS staff deleted polygons outside of Bay County and saved the data as **qquads**. Polygon attributes **name4** and **name6** were then added, along with arc attribute **type**. Coverage was converted to a shapefile.

This data is provided with the understanding that the conclusions drawn from such information are solely the responsibilities of the user. The GIS data is not a legal representation of the features depicted, and any assumption of the legal status of this data is hereby disclaimed. Errors or omissions should be reported to the Bay County GIS Division 850-784-6171.

## Polygon Attribute Table Structure

1 orygon Autibute Table Structure				
Item Name	Width	Output	Type	<b>Decimals</b>
quad_name	40	40	$\mathbf{C}^{-}$	-
quarter	2	2	C	-
quad_num	4	4	I	0
xmin	8	8	I	0
ymin	8	8	I	0
xmax	8	8	I	0
ymax	8	8	I	0
name	40	40	C	-
name4	4	4	C	-
name6	6	6	C	-
Arc Attribute Ta	able Structure			
type	2	2	C	-

# Attributes

quad\_name

USGS quad name. e.g. FOUNTAIN

quarter

Quarter name: nw, ne, se, or sw e.g. NW

quad\_num

FDEP quad number, ranging 4844 - 5344 e.g. 5244

name

Quarter-quad name, combining quad\_name, parentheses and quarter e.g. FOUNTAIN ( NW )

name4

USGS quad name, abbreviated to first 4 unique letters e.g. FOUN

name6

Quarter-quad name, abbreviated to **name4** and **quarter** e.g. FOUNNW

xmin

ymin

xmax

ymax

type

Line type: q = quad boundary, qq = quarter-quad boundary

#### FDEP LINEAGE REPORT

## PROVIDING ORGANIZATION

AGENCY: Florida Department of Environmental Protection

CONTACT PERSON : Eric W. Brockwell

TITLE: Systems Project Analyst

PHONE NUMBER : 904/488-0892 AGENCY DATA NAME : plss-100

The quarter quad grid was created by Henry Norris using ARC/INFO v.7.0.3 (UNIX, SUN SPARC 20).

This grid is to be used by FDEP and all the water management districts as the basis for library tiling schemes. This will ensure spatial consistency with regard to geographic extent of tiled data layers between these agencies.

At a meeting held October 10, 1995 it was determined that this grid was to be statewide and include that part of the Gulf of Mexico that is described by the Panhandle and peninsula. The cells would be 3.75 minutes on a side to reflect the USGS "quarter-quad" map series, and have a node every 15 seconds. The projection would be geographic and use the HPGN datum. The metric was to be decimal degrees.

The grid was created as follows:

- 1) Precision set to double -
  - :> precision double highest
- 2) Grid created using the ARC generate command; the grid cells need to be 3.75 minutes on a side (half of a quad) which, in terms of decimal degrees is .0625 by .0625. This was arrived at by dividing 3.75 by 60 -
  - :> generate q\_grid\_geo
  - :> Generate: fishnet
  - :> Fishnet Origin Coordinate (X,Y): -88.0,24.0
  - :> Y-Axis Coordinate (X,Y): -88.0,27.0
  - :> Cell Size (Width, Height): .0625, .0625
  - :> Number of Rows, Columns: 116,144
  - :> Generate: q
- 3) Built the coverage as a poly and a line cover -
  - :> build q\_grid\_geo poly
  - :> build q\_grid\_geo line
- 4) Established projection parameters (this part bothers me\*)-
  - :> projectdefine cover q\_grid\_geo
  - :> Project: projection geographic
  - :> Project: units dd
  - :> Project: datum hpgn
  - :> Project: parameters
- 5) Set all valid tolerances to a reasonable level of precision. Note that this coverage is geographic and covers a huge area, therefore, precision levels are all in terms of decimal degrees which means that .001 represents 1/1000 of a degree or approximately 6 feet. This means that the default settings

are not going to be acceptable -

- :> tolerance q\_grid\_geo weed .00001
- :> tolerance q\_grid\_geo fuzzy .00001
- :> tolerance q\_grid\_geo nodesnap .00001
- :> tolerance q\_grid\_geo snap .00001
- 6) Built the coverage again
  - :> build q\_grid\_geo
- 7) Added nodes every 15 seconds -
  - :> densifyarc q\_grid\_geo q\_grid\_geod .004166667 arc
- 8) generated a TIC coverage using all the appropriate parameters explained above.
- 9) Someone else can label and attribute these babies.
- 10)\* Projectdefine is used here and I'm not happy with this. Whether I specify NAD27 or HPGN I don't see the arcs themselves moving (of course). So what we really need is a set of known control points in HPGN geographic so that we can transform the grid to them.
- If there are any questions I can be reached at 813 896-8626.